

Safety Data Sheet

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Product name: Potassium sulphate 80%

Use of the substance/preparation

Fertilizer

Company/undertaking identification

Company: Energea Umwelttechnologie GmbH, Klosterneuburg, A-3400 Austria

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2. Composition/information on ingredients

Potassium sulphate	70 - 85%
Glycerol	15 - 25%
FFA/FAME	< 5%
Methanol	< 0.3%
Water	< 2%

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open.

After swallowing: make victim drink plenty of water. Consult doctor if feeling unwell.

5. Fire-fighting measures

Suitable extinguishing media:

Water, CO₂, foam, powder or in adoption to materials stored in the immediate neighbourhood.

Special risks:

Non-combustible. Ambient fire may liberate hazardous vapours. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

The following may develop in event of fire: sulphur oxides, Acrolein and carbon monoxide.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:

Cool container with spray water from a safe distance. Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:

Do not inhale vapours/aerosols or dust.

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Environmental-protection measures:
Do not allow to enter sewerage system.

Procedures for cleaning / absorption:
Take up with liquid-absorbent material (e.g. Chemizorb®). Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:
No further requirements.

Storage:
Tightly closed. Storage temperature: At +5°C to +30°C. Storage recommendation: Closed container skip, Big-Bags

8. Exposure controls/personal protection

Personal protective equipment:
Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when vapours/aerosols are generated.
Filter A (ace. to DIN 3181) for vapours of organic compounds- Filter P 1 (ace. to DIN 3181) for solid particles of inert substances.

Eye protection: required

Hand protection: In full contact:

Glove material:	nitrile rubber
Layer thickness:	0.11 mm
Breakthrough time:	> 480 Min.

In splash contact:

Glove material:	nitrile rubber
Layer thickness:	0.11 mm
Breakthrough time:	> 480 Min.

Industrial hygiene:
Change contaminated clothing. Wash hands after working with substance.

9. Physical and chemical properties

Form:	Solid, crumbly, fatty	
Colour:	light brown	
Odour:	Smells of Feedstock	
pH value		
at 50 g/l H ₂ O	(20 °C)	3.5-7.5
Melting point		~1069 °C
Boiling point		not applicable
Ignition temperature		not applicable
Flash point		not applicable
Explosion limits	lower	not available
	upper	not available

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Vapour pressure	not applicable		
Density	~ 1200	kg/m ³	
Solubility in			
water	(20 °C)	110	g/l
water	(100 °C)	240	g/l
Temperature class	T3 (due to small content of FAME)		

10. Stability and reactivity

Conditions to be avoided: Strong heating.

Substances to be avoided:

Aluminium / heat and magnesium / heat, strong oxidizing agents, nitric acid / cone, sulphuric acid, phosphorus oxides, peroxi compounds, hydrogen peroxide, halogens.

Hazardous decomposition products
in the event of fire: See chapter 5.

Further information

Explosible with air in a vaporous/gaseous state when heated.

11. Toxicological information

Acute toxicity

LD₅₀ (oral, rat): 6600 mg/kg.

Further toxicological information

After uptake of large quantities: Symptoms in: gastrointestinal tract.

Properties to be expected on the basis of the main component of the preparation:

After inhalation: Irritation symptoms in the respiratory tract.

After skin contact: Slight irritations.

After eye contact: Slight irritations.

After swallowing of large amounts: vomiting, gastric pain, headache, drowsiness, diarrhoea, cyanosis.

Further data

The product should be handled with the care usual when dealing with chemicals.

Subacute to chronic toxicity

Sensitization:

Patch test (humans): No sensitizing effect.

12. Ecological information

Biologic degradation:

Methods for the determination of biodegradability are not applicable to inorganic substances.

Behaviour in environmental compartments: Concentration in organisms is not to be expected.

Further ecologic data:

The following applies to sulphate in general: biological effects: fish: toxic as from 7 g/l;

bacteria: toxic as from 2.5 g/l.

No ecological problems are to be expected when the product is handled and used with due care and attention.

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ENERGEA

biodiesel technology

According to EC Directive 91/155/EEC

04.03.2005

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations.

Packaging:

Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. Transport information

Transport recommendation: Closed screw conveyor to avoid inert gas losses from salt dryer.

15. Regulatory information

16. Other information

Reason for alteration

Chapter 5: fire-fighting measures.

Chapter 9: change/addition in physical/chemical properties.

Chapter 10: stability and reactivity.

General update.

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.